

CLAIMS

We claim:

1. A method for optimizing an image capturing device in order to improve image quality, the method comprising:
collecting data related to a captured image from the image capturing device and storing the data externally from the image capturing device;
comparing the collected data to previously stored data; and
determining adjustments for optimizing the image capturing device based on the comparison.
2. The method of claim 1, further comprising forwarding the determined adjustments to a user interface for user evaluation.
3. The method of claim 1, further comprising, automatically making the adjustments to the image capturing device.
4. The method of claim 1, wherein comparing the data to previously stored data comprises performing a metadata analysis.
5. The method of claim 1, wherein comparing the data to previously stored data comprises performing pattern analysis.
6. The method of claim 1, wherein comparing the data to previously stored data comprises performing device settings analysis.
7. The method of claim 1, further comprising presenting help topics to a user interface.
8. The method of claim 1, further comprising collecting the data through a connectivity layer and making changes to image capturing device settings through the connectivity layer.

9. The method of claim 8, further comprising sending the collected data to an image and context analysis manager for analysis.

10. The method of claim 9, further comprising maintaining a real time wireless connection between the image capturing device and the connectivity layer.

11. A computer-readable medium having computer-executable instructions for performing the method recited in claim 1.

12. A system for optimizing an image capturing device in order to improve image quality, the system comprising:

data collection apparatus for collecting data related to a captured image from the image capturing device and for sending the data to a storage device;

data analysis tools for comparing captured data to previously stored data;

optimization tools for optimizing the image capturing device based on the data analysis.

13. The system of claim 12, wherein the data collection apparatus comprises a connectivity layer operable for sending image-related data to the data analysis tools.

14. The system of claim 12, wherein the data analysis tools comprise an image and context analysis manager.

15. The system of claim 14, wherein the image and context analysis manager comprises a plurality of filters for processing and analyzing different types of image-related data.

16. The system of claim 15, wherein the filters comprise an image analysis filter, a device settings and context analysis filter, and a usage and pattern analysis filter.

17. The system of claim 12, wherein the optimization tools comprise a user interface for providing instructions and recommendations to the user for improving image quality.

18. The system of claim 12, wherein the optimization tools comprise core services and a connectivity layer for sending adjustments directly to the image capturing device.

19. The system of claim 12, further comprising a data aggregating and uploading manager for facilitating maintenance of usage statistics.

20. A method for analyzing captured images, the method comprising:
collecting data related to a newly captured image, the data including image quality data and context data;
comparing the image quality data to stored image quality data to determine a deviation from ideal image quality data and comparing context data for the newly captured image to stored context data; and
determining one or more adjustments to optimize an image capturing device to improve image quality based on the comparison.

21. The method of claim 20, further comprising forwarding the determined adjustments to a user interface for user evaluation.

22. The method of claim 20, further comprising, automatically making the adjustments to the image capturing device.

23. The method of claim 20, wherein comparing the context data to previously stored context data comprises performing device settings analysis.

24. The method of claim 20, further comprising presenting help topics to a user interface.

25. The method of claim 20, further comprising collecting the data through a connectivity layer and making changes to image capturing device settings through the connectivity layer.

26. The method of claim 25, further comprising sending the collected data to an image and context analysis manager for analysis.

27. The method of claim 26, further comprising maintaining a real time wireless connection between the image capturing device and the connectivity layer.

28. A computer-readable medium having computer-executable instructions for performing the method recited in claim 20.

29. A system for optimizing an image capturing device in order to improve image quality, the system comprising:

data collection apparatus for collecting data related to a captured image from the image capturing device, the data including image data and context data;

image data analysis tools for comparing newly captured image data to stored image data and for sending the image data to a storage device;

device and context analysis tools for comparing current context data with stored context data and for sending the context data to the storage device;

optimization tools for determining how to optimize the image capturing device to improve image quality based on the image data analysis and context data analysis.

30. The system of claim 29, wherein the data collection apparatus comprises a connectivity layer operable for sending image data to the image data analysis tools and context data to the device and context analysis tools.

31. The system of claim 29, further comprising a usage and pattern analysis filter.

32. The system of claim 29, wherein the optimization tools comprise a user interface for providing instructions and recommendations to the user for improving image quality.

33. The system of claim 29, wherein the optimization tools comprise core services and a connectivity layer for sending adjustments directly to the image capturing device.

34. The system of claim 29, further comprising a data aggregating and uploading manager for facilitating maintenance of usage statistics.

35. A system for improving the quality of images captured by an image capturing device, the system comprising:

image analysis filters for deducing image metadata from collected image bits and for recording the image metadata;

device settings and session context analysis filters for analyzing device settings and context during image capture; and

means for determining appropriate corrective measures based on the deduced image metadata, device settings and context analysis, and historical data.

36. The system of claim 35, further comprising data collection apparatus including a connectivity layer operable for sending image-related data to the image analysis filters and the device setting and session context analysis filters.

37. The system of claim 35, further comprising a usage and pattern analysis filter.

38. The system of claim 35, wherein the means for determining appropriate corrective measures comprise a user interface for providing instructions and recommendations to the user for improving image quality.

39. The system of claim 35, wherein the means for determining appropriate corrective measures comprise core services and a connectivity layer for sending adjustments directly to the image capturing device.

40. The system of claim 35, further comprising a data aggregating and uploading manager for facilitating maintenance of usage statistics.

41. A method for analyzing a captured multimedia object, the method comprising:
collecting data related to a newly captured multimedia object, the data including multimedia quality data and multimedia context data;
comparing the multimedia quality data to stored multimedia quality data to determine a deviation from ideal multimedia quality data and comparing multimedia context data for the newly captured multimedia object to stored multimedia context data; and
determining one or more adjustments to optimize a multimedia capturing device to improve multimedia quality based on the comparison.

42. The method of claim 41, wherein the captured multimedia object comprises at least one of a video object and an audio object.